

BookletChartTM

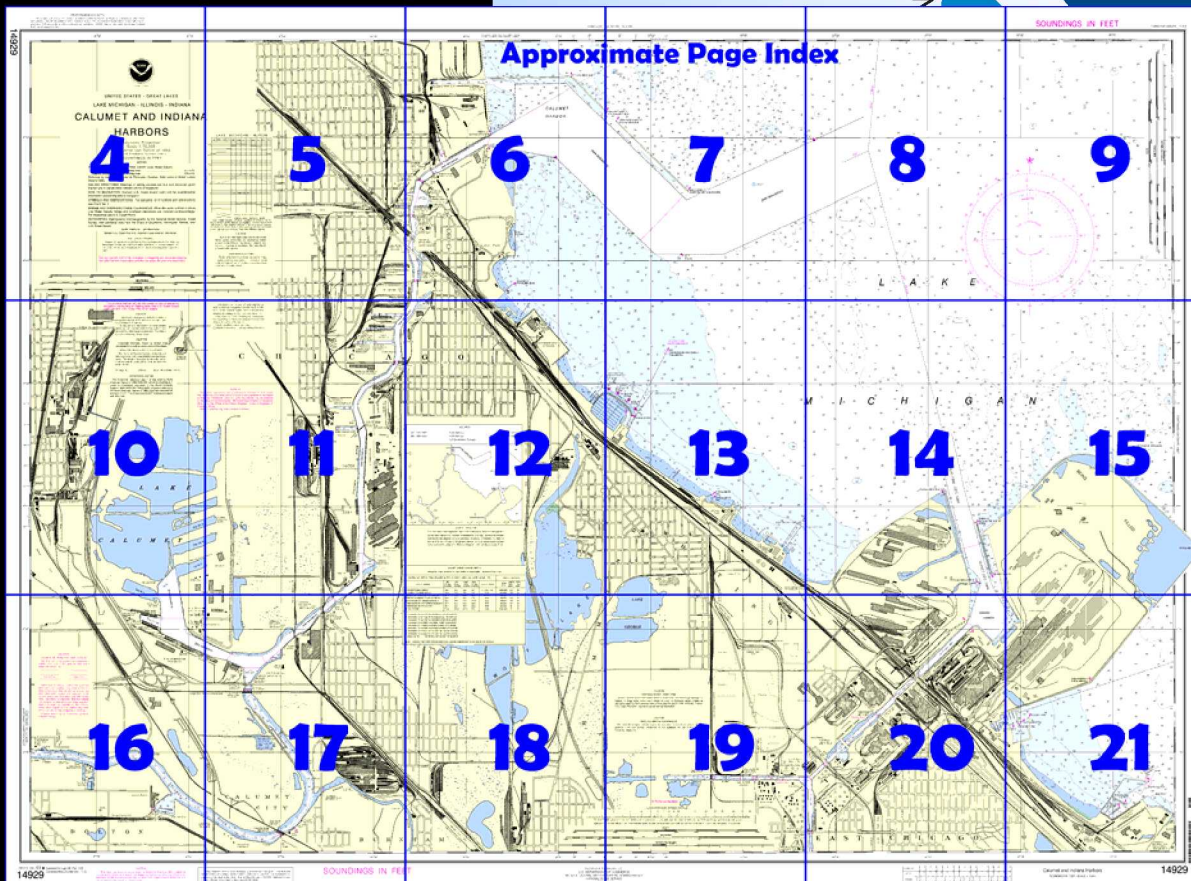
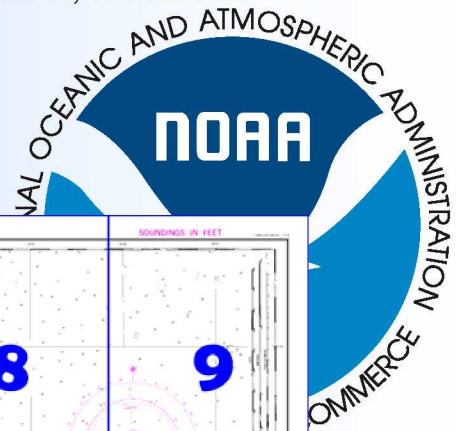
Calumet and Indiana Harbors

(NOAA Chart 14929)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

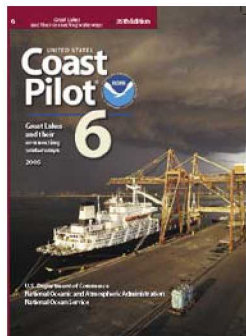
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 11 excerpts]

(433) From Gary Harbor to Wilmette, Ill., 36 miles NW, the SW shore of Lake Michigan is developed with extensive private commercial facilities, public utilities, marinas, and yacht clubs.

(434) **Buffington Harbor**, a private harbor owned by the Lehigh Portland Cement Co., is about 3 miles SE of Indiana Harbor and 4.5 miles NW of Gary Harbor. The harbor is built in the lake in front of the company's plant on bulkheaded and filled land that extends 2,400

to 2,900 feet beyond the natural shoreline.

(439) **Indiana Shoals**, an extensive bank in the approaches to Indiana Harbor and Calumet Harbor, extends about 5 miles NE from the outer end of the fill area which forms the E side of the entrance to Indiana Harbor. The bank has several ridges with depths of 15 to 18 feet near its inner end, and has depths of 22 to 30 feet near its outer end. A lighted

gong buoy marks the E side of the bank.

(441) **Indiana Harbor**, an artificial harbor at **East Chicago, Ind.**, is about 3 miles NW of Buffington Harbor and 6 miles SE of Calumet Harbor. The harbor has an outer basin which is entered from N and is enclosed by bulkheaded fill areas that extend 2.6 miles NE from the natural shoreline. The outer corners of the bulkheads are marked by private lights. The fill area S and E of the basin is occupied by Inland Steel Co., and the area W of the entrance channel and basin is occupied by LTV Steel Co. The inner harbor is formed by a dredged canal that extends SW from the outer basin into the shoreline.

(442) **Indiana Harbor East Breakwater Light** (41°40'51"N., 87°26'28"W.), 49 feet above the water, is shown from a square tower on the E side of the entrance channel; a seasonal fog signal is at the light. Channels

(443) The dredged entrance channel leads SSE from deep water in Lake Michigan between breakwaters to an outer harbor basin. The entrance channel is marked by a buoy and by lights on the outer and inner ends of the breakwaters. From the outer harbor basin, a canal entrance channel extends SW to **Indiana Harbor Canal** which continues SW for 1.4 miles to a turning basin at **The Forks**. The entrance to the canal is marked by lights. The channel width in the canal is restricted by the clear width of the bridge span openings of 61.7 feet. From The Forks, **Calumet River Branch** extends S for about 0.4 mile to just below Columbus Drive bridge, and **Lake George Branch** extends W for about 0.6 mile.

(467) **Calumet (South Chicago) Harbor** is 14 miles NW of Gary Harbor and about 333 miles by water from the Straits of Mackinac. The harbor is in the S part of the city of **Chicago, Ill.**, and comprises an outer harbor protected by breakwaters and the **Calumet River**. The city of Chicago, including Calumet and Chicago Harbors, is one of the largest inland ports in the world. Deep-draft traffic enters the harbors from Lake Michigan, and barge traffic enters from the Mississippi River via the Illinois Waterway. The principal commerce in the port includes receipt of iron ore, coal, and limestone.

(469) **Calumet Harbor Light** (41°44.3'N., 87°30.5'W.), 51 feet above the water, is shown from a white cylindrical tower with an attached building on the N side of the breakwater gap 1.2 miles E of the Calumet River mouth.

(470) **Calumet Harbor Breakwater South End Light** (41°43'34"N., 87°29'36"W.), 50 feet above the water, is shown from a white square skeleton tower with red band, lower half open, on the SE end of the Calumet Harbor breakwater, a fog signal is at the light. This light is sometimes difficult to distinguish from vehicle lights on shore.

(472) **North Slip** opens into the outer harbor 0.5 mile N of the mouth of Calumet River. Overhead power cables with a clearance of 109 feet cross the mouth of the slip. **South Slip** is entered 0.4 mile above the river mouth. A system of submerged bubbler pipes crosses the mouth of each slip; vessels are cautioned not to drop or drag anchor in the vicinity.

(477) **Grand Calumet River** formerly emptied into Lake Michigan at Gary, Ind., but its mouth is now closed, and it is a dead river 18 miles long with a very small drainage area. There is no current in the river except what is caused by floods and freshets. Except for several shoals, the river is navigable by shallow-draft launches that can pass under the bridges.

(479) **Lake Calumet**, NW of Turning Basin No. 5, is about 1.2 miles long N and S and about 1 mile wide. The lake is at practically the same level as Lake Michigan and has an average depth of about 2 feet. A temporary earth dike has been constructed at the S end of Lake Calumet by the Illinois International Port.

(483) Several shoals are in the approach to Calumet Harbor. A rocky bank with a least depth of 21 feet is 1 mile NE of Calumet Harbor Breakwater South End Light. A lighted buoy at the SE end of the ledge marks the N side of the dredged approach channel. Two 23-foot spots and a 27-foot spot, 2 to 2.5 miles NE of Calumet Harbor Light, are marked on the E side by a lighted bell buoy. **Calumet Bar**, an extensive area with depths of 21 to 24 feet, is on the NE side of the breakwater and extension.

Table of Selected Chart Notes

Corrected through NM Feb. 1/03
Corrected through LNM Dec. 17/02

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area

Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

(Accurate location)

(Approximate location)

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

Average levels (1992-2001)

Extreme Levels (period of record)

Low Water Datum, which is the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1902 must be corrected an average of 0.011" northward and 0.329" westward to agree with this chart.

NOAA VHF-FM WEATHER BROADCASTS

The National Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

STAC

2 Ve

Oc f

Chicago, IL KWO-39 162.55 MHz (Chan, WX-1)

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio, or at the Office of the District Engineer, Corps of Engineers in Chicago, Illinois.

Refer to charted regulation section numbers.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, [United States Coast Pilot](#).

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

CAUTION

POTABLE WATER INTAKE (PWI)

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum)

Depths lakeward of the controlling lock..... 577.5 ft.

Depths landward of the controlling lock 576.9 ft.

Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum(1985).

SYMBOLS AND ABBREVIATIONS.

For complete list of symbols and abbreviations see Chart No. 1.

BRIDGE AND OVERHEAD CABLE CLEARANCES.

When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

SAILING DIRECTIONS.

Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

AUTHORITIES.

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

AIDS TO NAVIGATION.

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CALUMET HARBOR CHANNEL DEPTHS									
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO NOV 2001									
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)	
ENTRANCE TO BKW S END LT	25.8	27.6	28.0	29.7	11-12-98, 11-01	3000-3200	2.24	29	
BKW S END LT TO RIVER ENTR LT	A24.2	25.4	26.6	19.6	11-01	300-3000	2.00	28	
RIVER ENTR LT TO INTERSTATE 90 BRIDGE	26.4	27.5	26.4	B20.3	10,11-01	100-300	1.44	27	
INTERSTATE 90 BRIDGE TO 106th ST BRIDGE	24.4	25.7	26.7	17.5	10-01	160-320	1.09	27	
106th ST BRIDGE TO TURNING BASIN NO 3	24.6	26.8	24.6	C20.4	10-01	160-400	1.95	27	
TURNING BASIN NO 3 TO TURNING BASIN NO 5	24.4	25.4	25.4	D20.0	10-01	200-450	1.47	27	
TURNING BASIN NO 5 TO SLP NO 1	26.0	26.4	26.5	E16.3	10-01	400-1200	.98	27	
SLP NO 1 TO END	F18.2	G23.8	H24.0	I23.0	10-01	1000-1200	.37	27	
A. SHOALING TO 15.9 FEET IN OUTSIDE 20 FEET OF QUARTER. B. SHOALING TO 13.7 FEET IN OUTSIDE 20 FEET OF QUARTER. C. SHOALING TO 14.1 FEET IN OUTSIDE 15 FEET OF QUARTER. D. SHOALING TO 8.5 FEET IN OUTSIDE 15 FEET OF QUARTER. E. SHOALING TO 7.9 FEET IN OUTSIDE 30 FEET OF QUARTER. F. SHOALING TO 10.6 FEET IN OUTSIDE 100 FEET OF QUARTER. G. SHOALING TO 1.7 FEET WITHIN LAST 100 FEET OF QUARTER. H. SHOALING TO 5.5 FEET WITHIN LAST 100 FEET OF QUARTER. I. SHOALING TO 11.4 FEET WITHIN LAST 100 FEET OF QUARTER.									
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION									

PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

14929

87°36'

87°35'



UNITED STATES - GREAT LAKES

LAKE MICHIGAN - ILLINOIS - INDIANA

CALUMET AND INDIANA HARBORS

Polyconic Projection

Scale 1:15,000

North American Datum of 1983

(World Geodetic System 1984)

SOUNDINGS IN FEET

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum)

Depths lakeward of the controlling lock 577.5 ft.

Depths landward of the controlling lock 576.9 ft.

Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

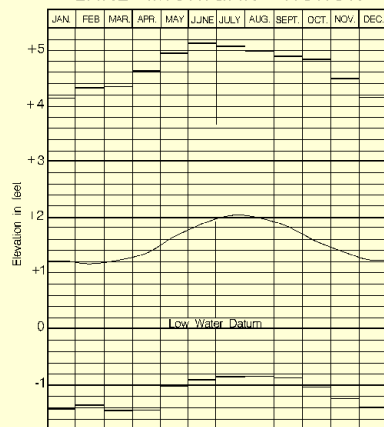
Consult U.S. Coast Pilot 6 for important supplemental information.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

LAKE MICHIGAN - HURON



Average levels (1992-2001)
Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or less than the charted depths.

CAUTION

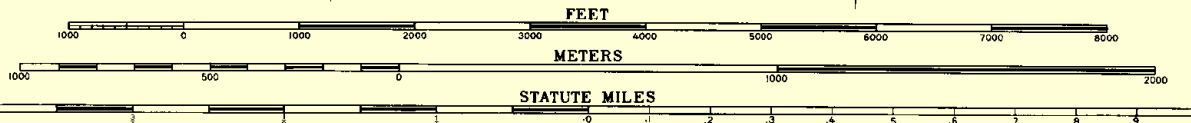
Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution. Station positions are shown thus:



WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariner. During some winter

Joins page 10

Printed at reduced scale.

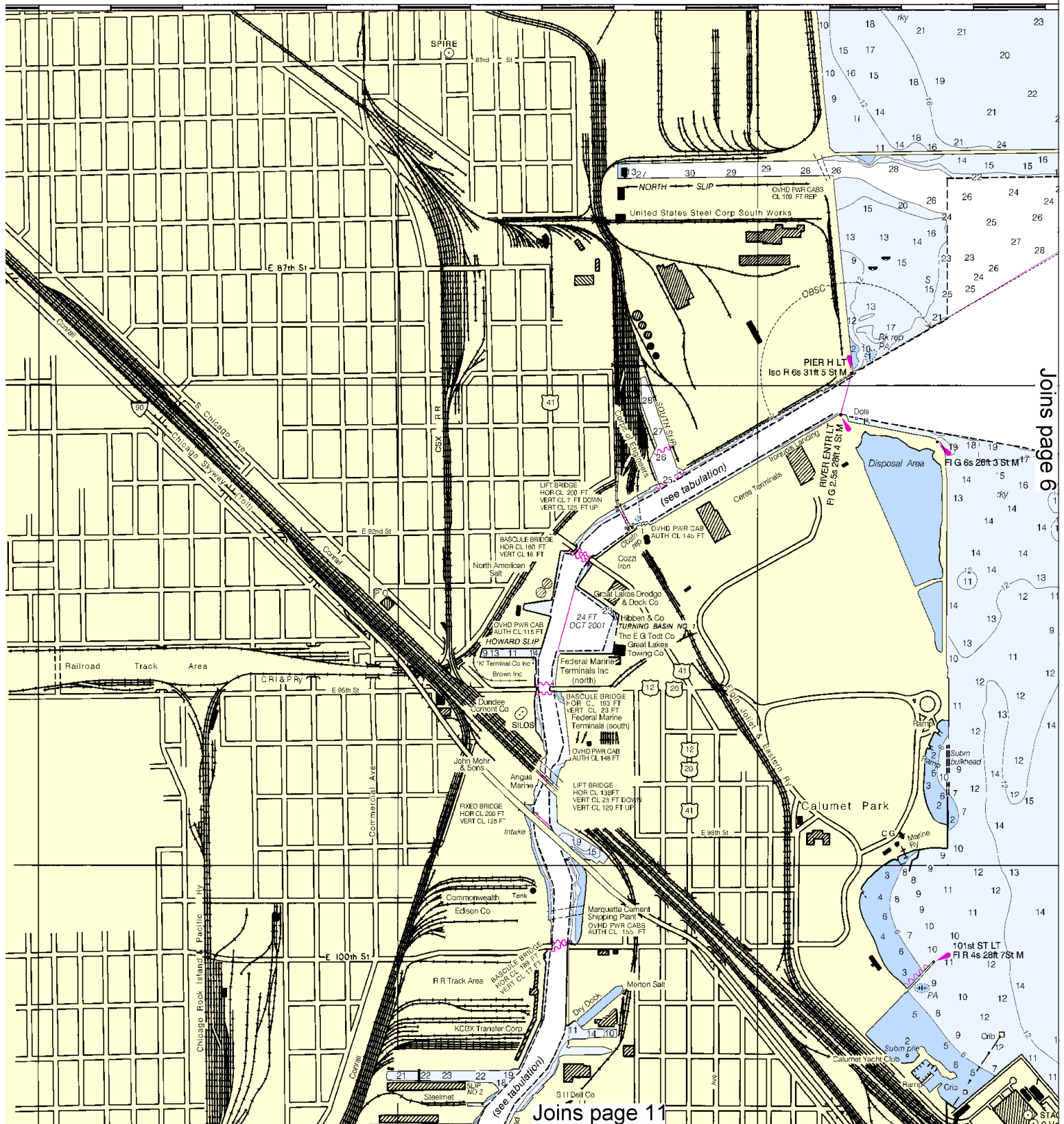
SCALE 1:15,000
Nautical Miles

See Note on page 5.

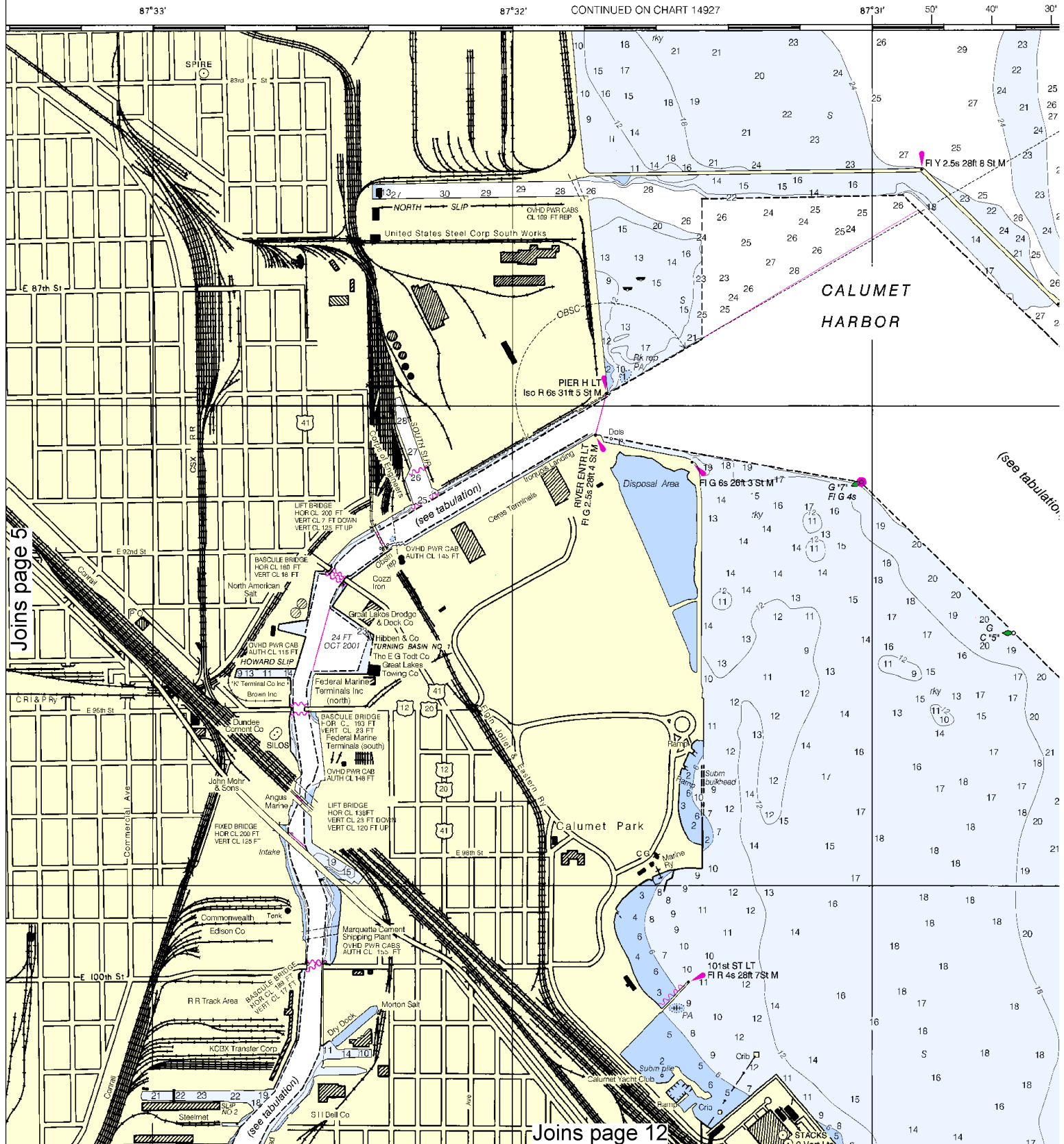


4





This BookletChart was reduced to 75% of the original chart scale.
 The new scale is 1:20000. Barscales have also been reduced and
 are accurate when used to measure distances in this BookletChart.



Joins page 5

Joins page 12

6

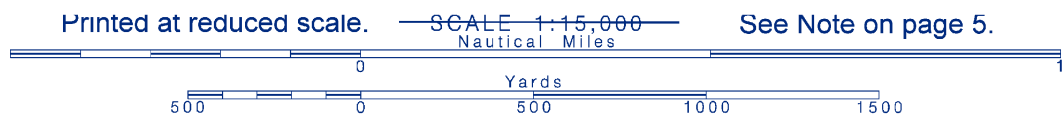
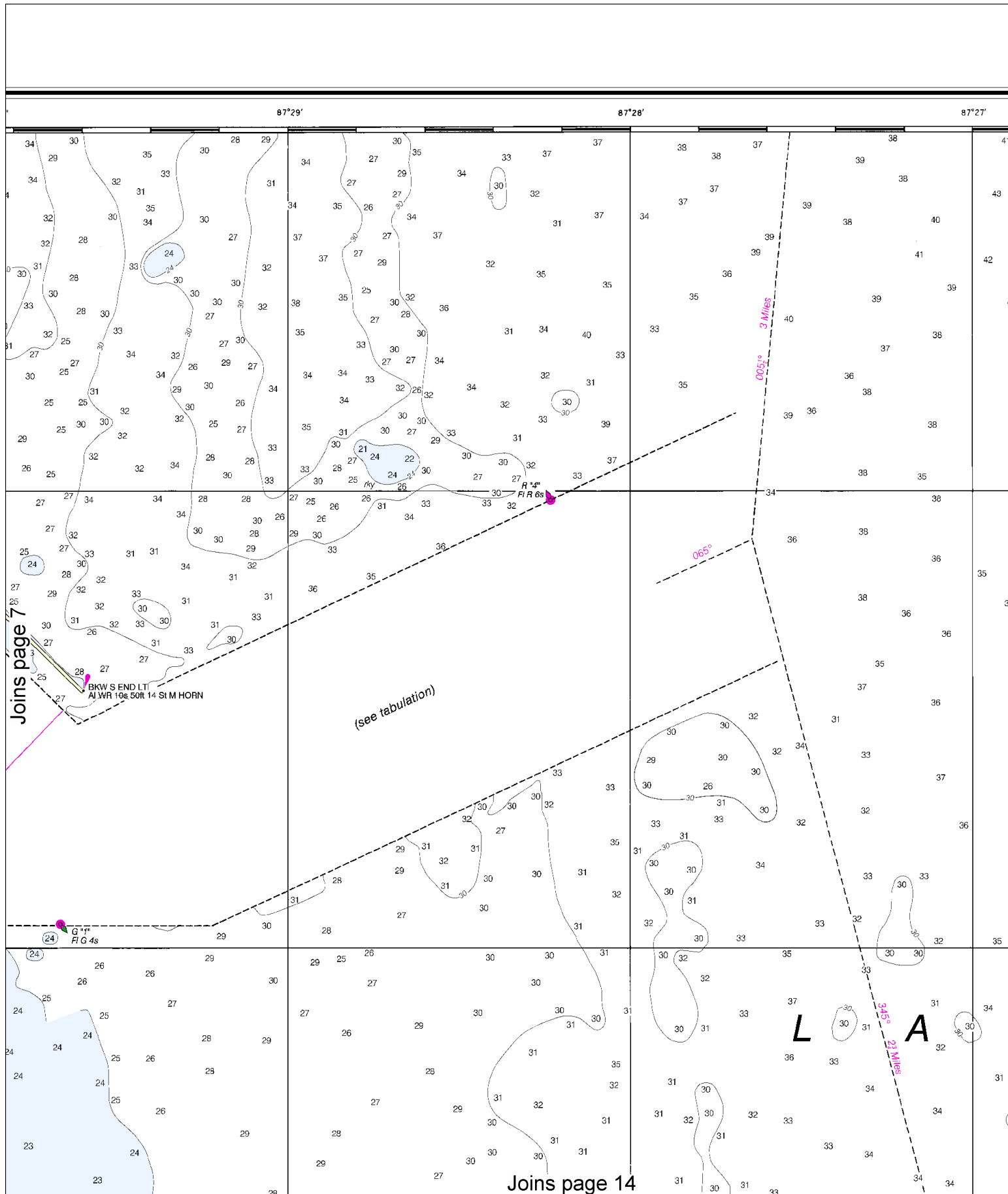


Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.





Nautical Chart Catalog No. 4, Panel B



WARNING

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CAUTION

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During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOAA VHF-FM WEATHER BROADCASTS

The National Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Chicago, IL KWO-39 162.55 MHz (Chan, WX-1)

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1902 must be corrected an average of 0.011" northward and 0.329" westward to agree with this chart.

CAUTION

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Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○ (Accurate location) ◐ (Approximate location)

C

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio, or at the Office of the District Engineer, Corps of Engineers in Chicago, Illinois.

Refer to charted regulation section numbers.

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10

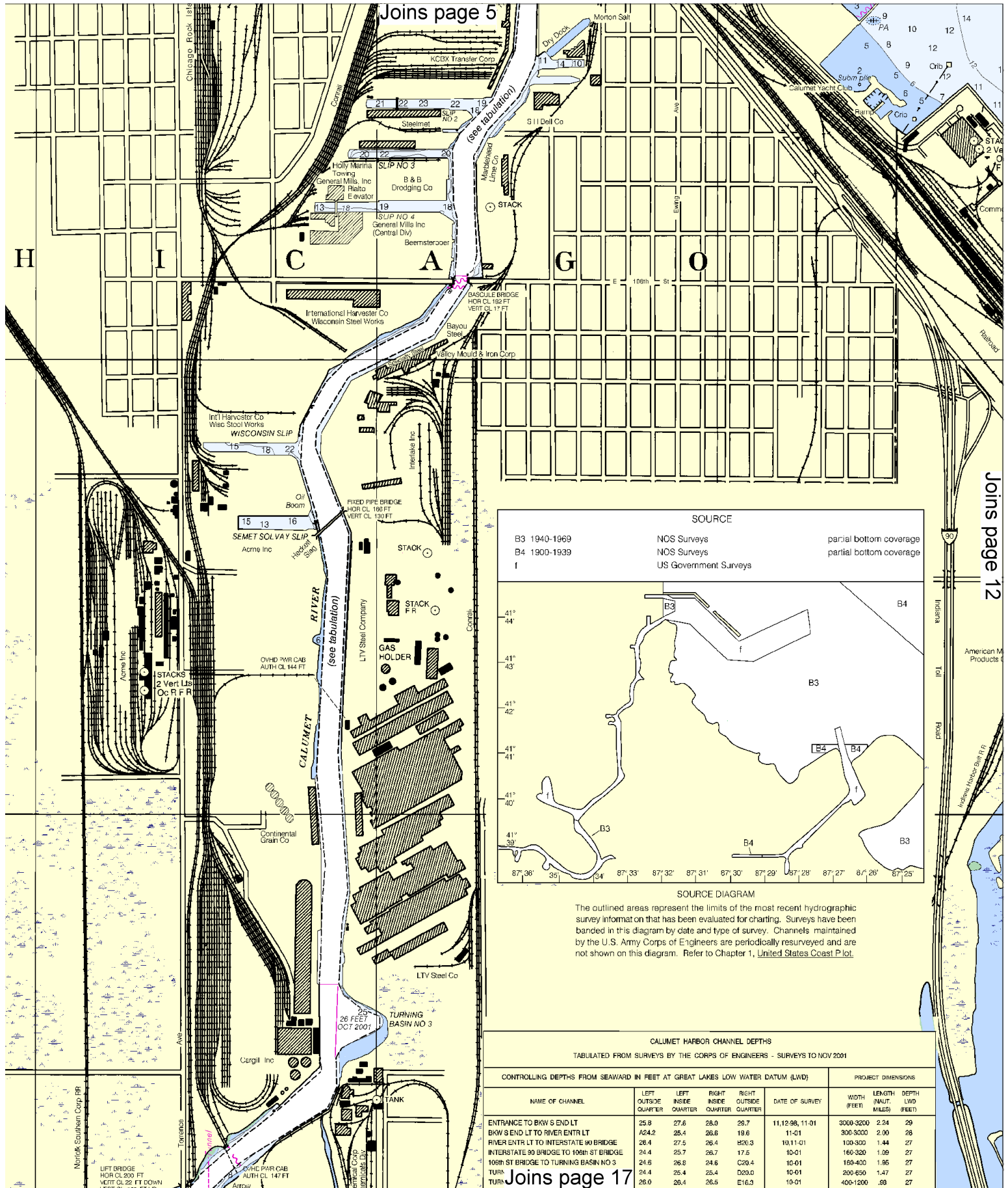


Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.

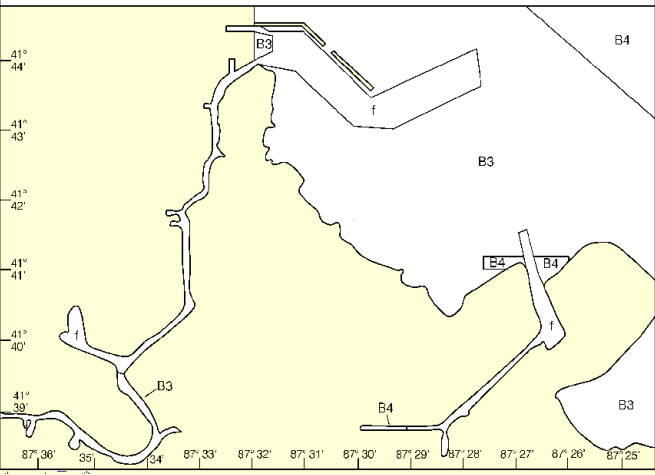




Joins page 5

Joins page 12

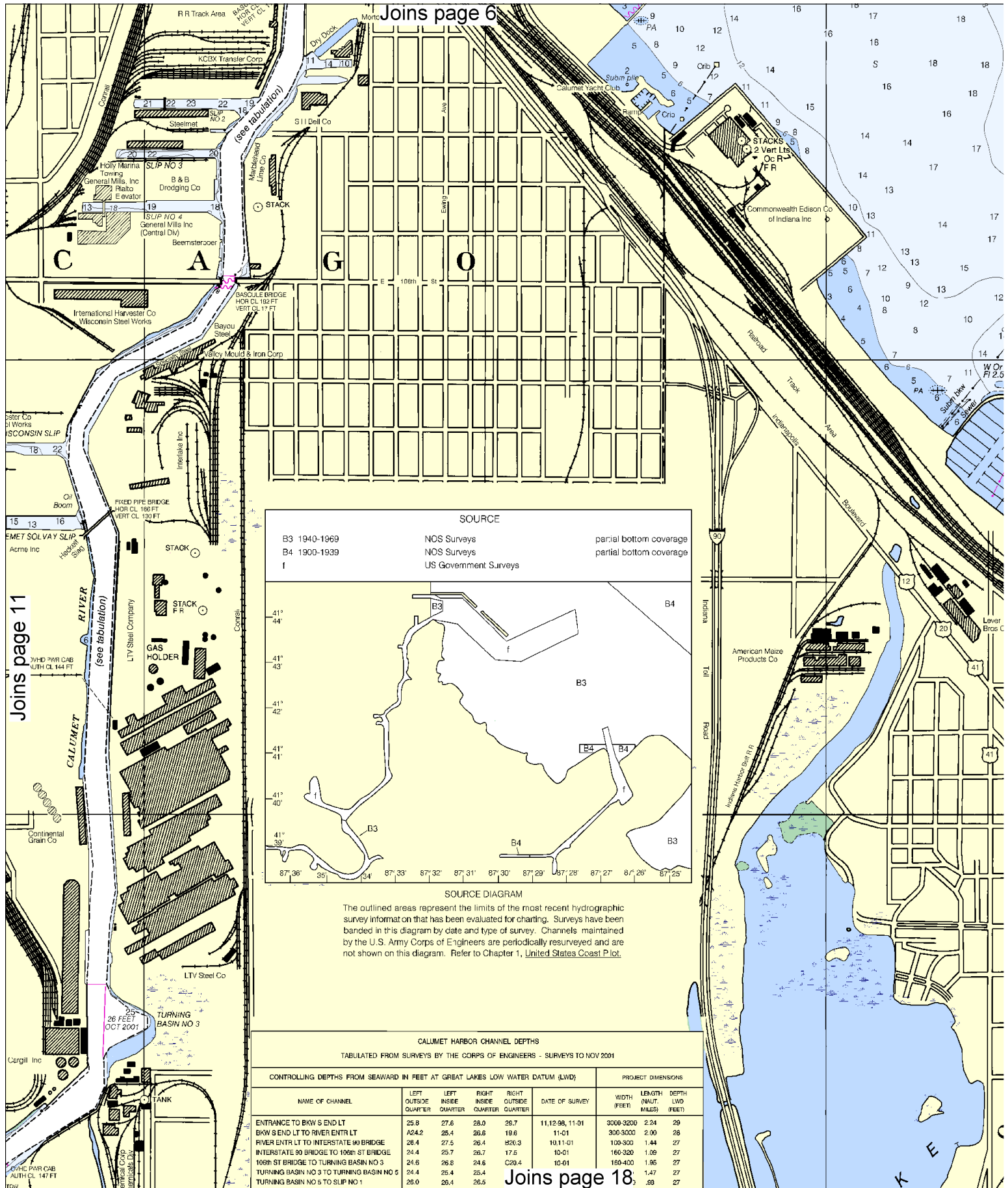
SOURCE		
B3 1940-1969	NOS Surveys	partial bottom coverage
B4 1900-1939	NOS Surveys	partial bottom coverage
f	US Government Surveys	

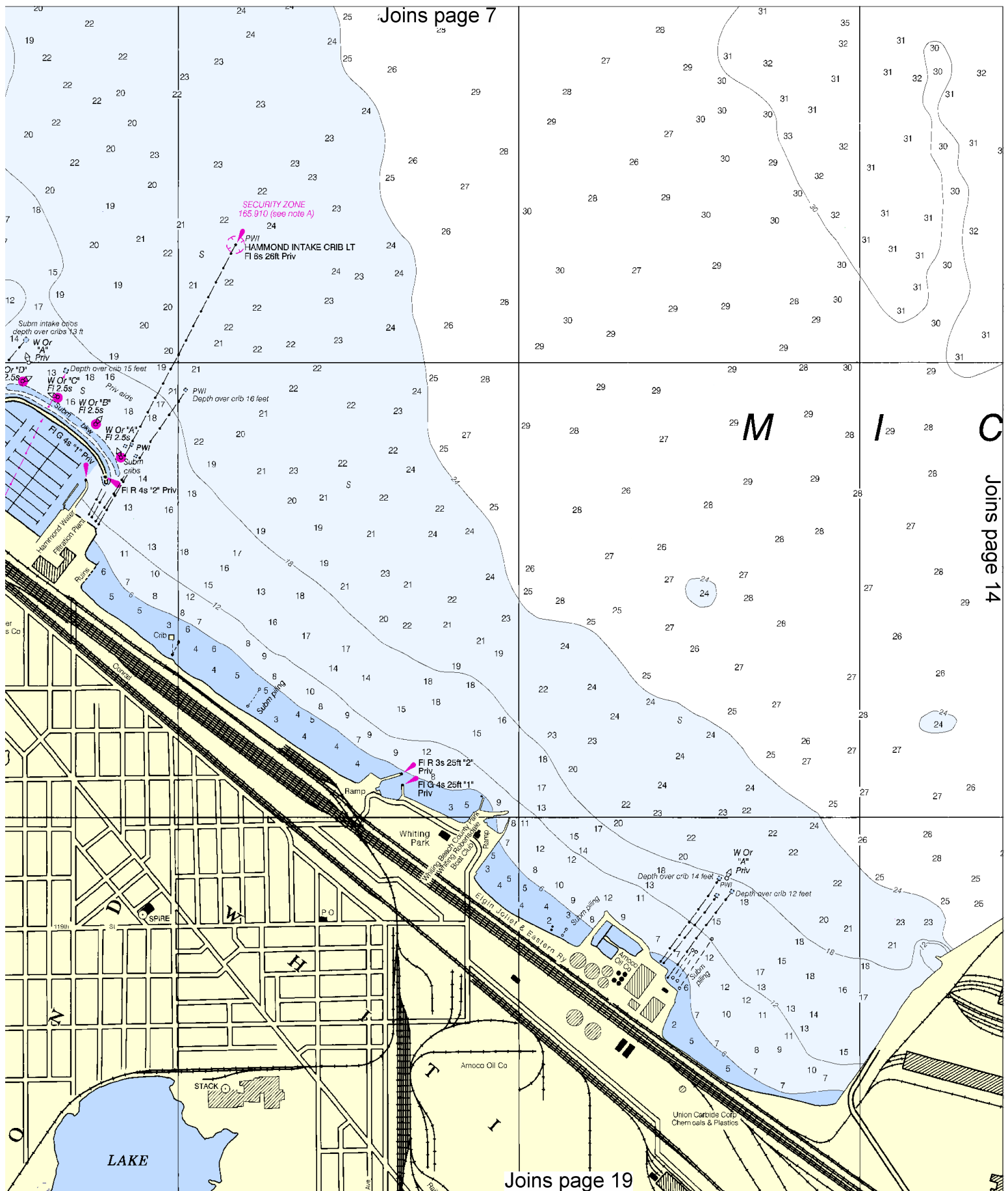


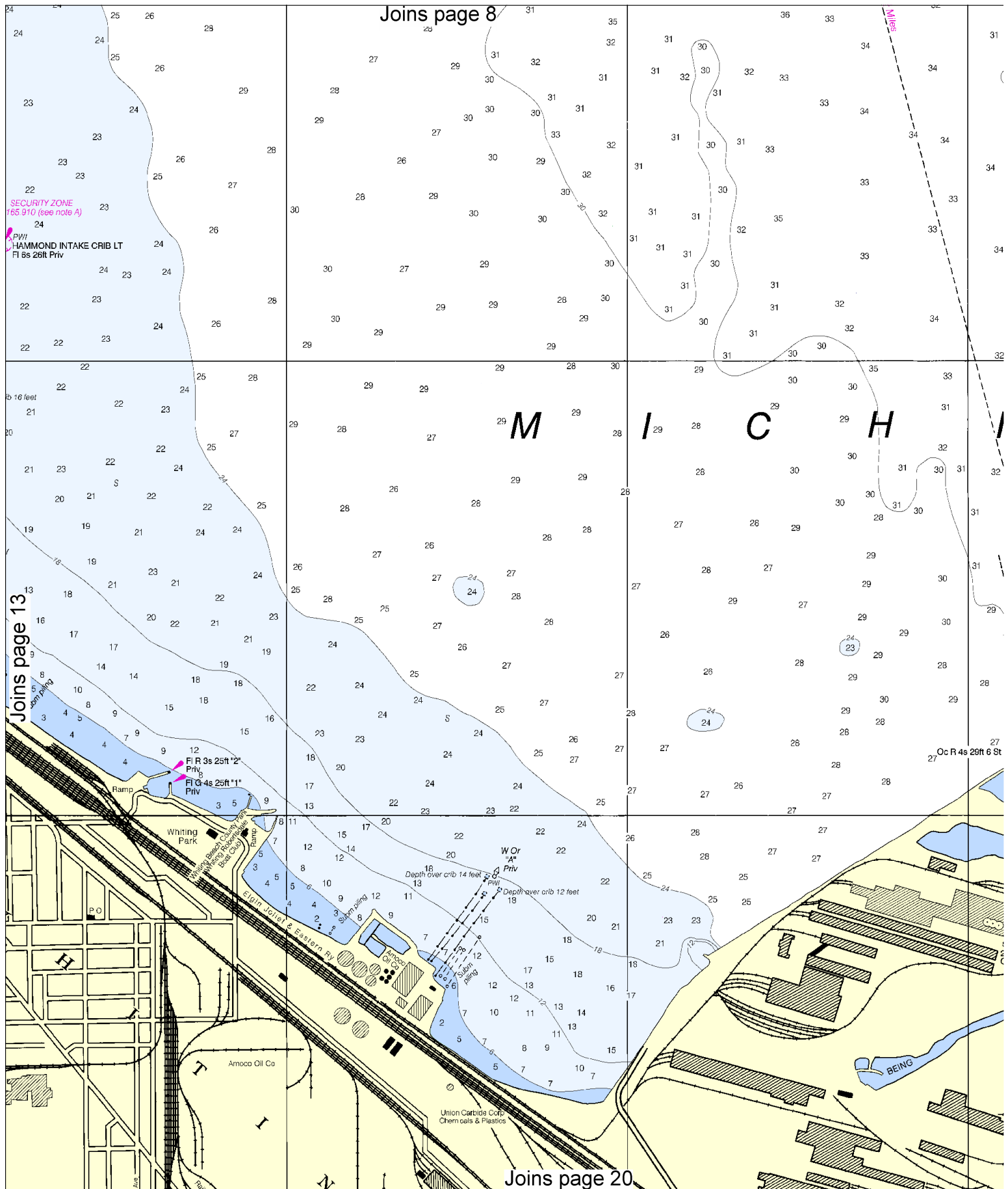
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CALUMET HARBOR CHANNEL DEPTHS									
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO NOV 2001									
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS			
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)	
ENTRANCE TO BKW S END LT	25.8	27.6	28.0	29.7	11,12,98,11-01	3000-3200	2.24	29	
BKW S END LT TO RIVER ENTR LT	A24.2	25.4	26.6	19.6	11-01	300-3000	2.00	28	
RIVER ENTR LT TO INTERSTATE 90 BRIDGE	26.4	27.5	26.4	B20.3	10,11-01	100-300	1.44	27	
INTERSTATE 90 BRIDGE TO 106th ST BRIDGE	24.4	25.7	26.7	17.5	10-01	160-320	1.09	27	
106th ST BRIDGE TO TURNING BASIN NO 3	24.6	26.8	24.6	C20.4	10-01	160-400	1.96	27	
TURN	24.4	25.4	25.4	D20.0	10-01	200-650	1.47	27	
TURN	26.0	26.4	26.5	E16.3	10-01	400-1200	.69	27	

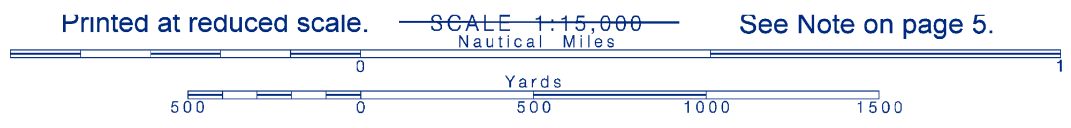
Joins page 17

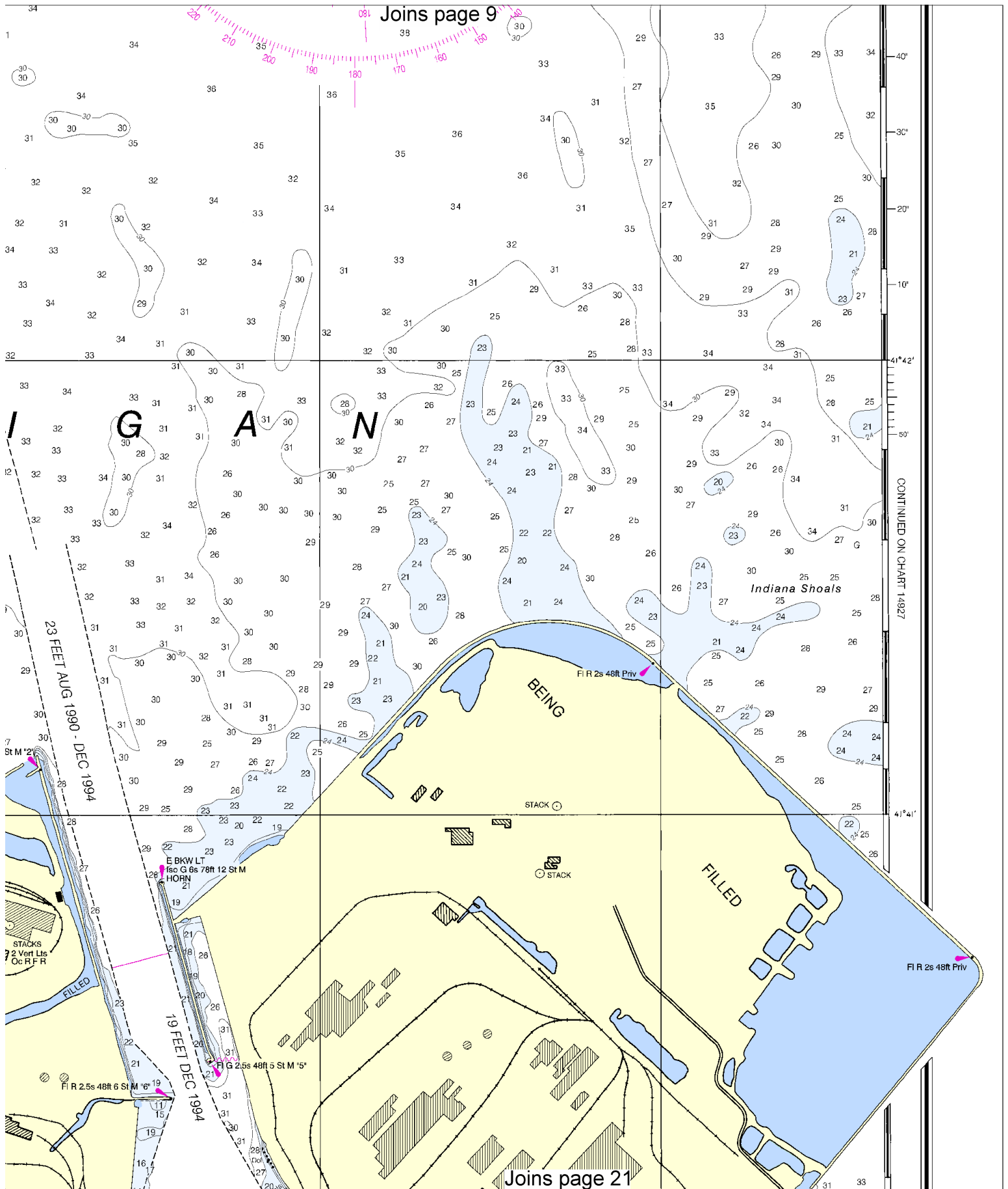






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CONTINUED ON CHART 14927

Joins page 10

41°40'

CAUTION
SUBMARINE PIPELINES AND CABLES
 Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

--- Pipeline Area --- Cable Area ---

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling.
 Covered wells may be marked by lighted or unlighted buoys.

CONTINUED ON ILLINOIS
 WATERWAY CHART BOOKLET

41°39'

87°36'

87°35'

24th Ed., Feb./03 ■ Corrected through NM Feb. 1/03
 14929 Corrected through LNM Dec. 17/02

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner

This nautical chart has been designed to promote safe navigation. Ocean Service encourages users to submit corrections, additions, or improvements to the Chief, Marine Chart Division (N/CS2), Naval Service, NOAA, Silver Spring, Maryland 20910-3282.

16



Printed at reduced scale.

SCALE 1:15,000
 Nautical Miles

See Note on page 5.

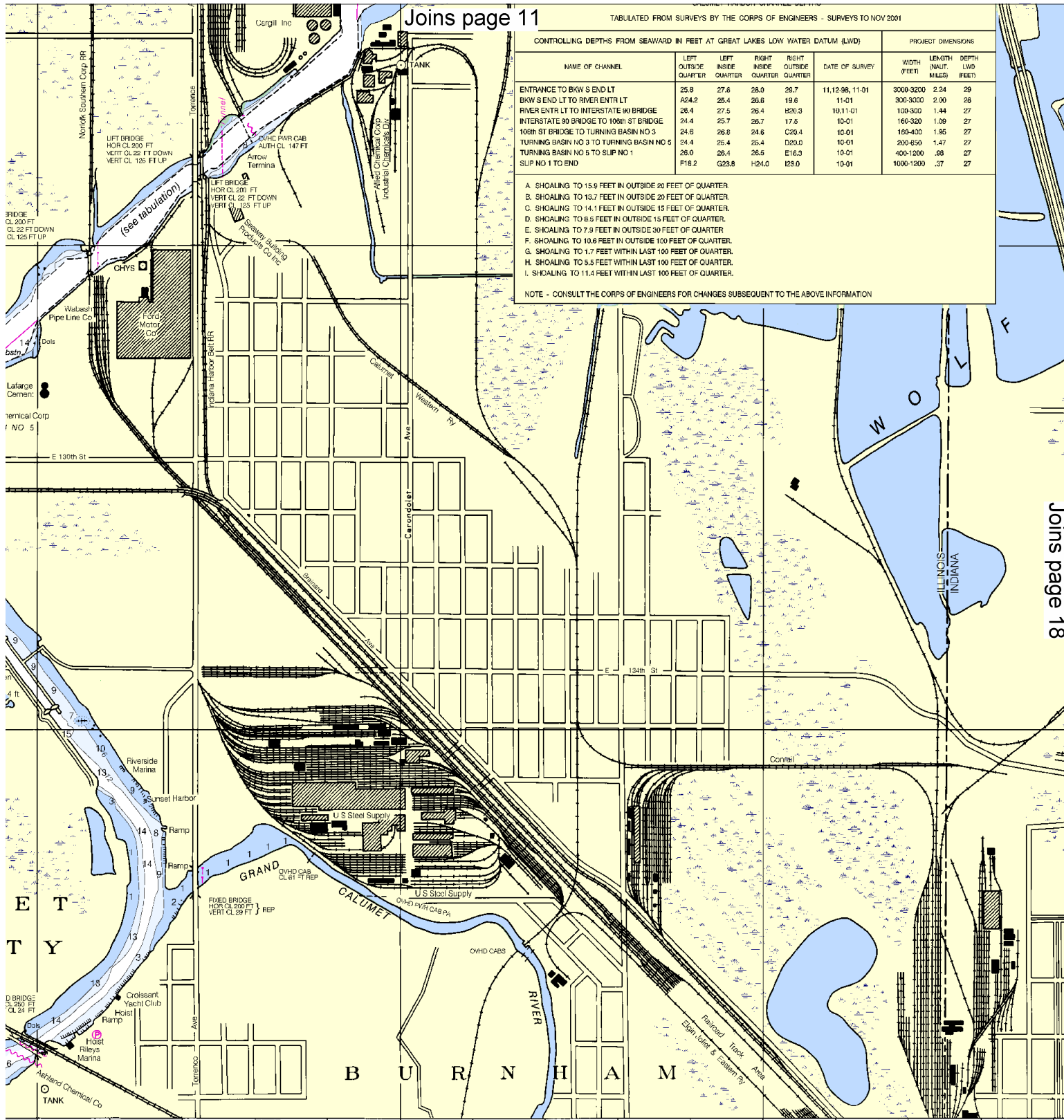
Yards
 500 0 500 1000 1500

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)

NAME OF CHANNEL	CONTROLLING DEPTHS				DATE OF SURVEY	PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER		WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH (FEET)
ENTRANCE TO BKW S END LT	25.8	27.6	28.0	29.7	11,12-98, 11-01	3000-3200	2.24	29
BKW S END LT TO RIVER ENTR LT	A24.2	25.4	26.6	19.6	11-01	300-3000	2.00	28
RIVER ENTR LT TO INTERSTATE 90 BRIDGE	26.4	27.5	26.4	B20.3	10,11-01	100-300	1.44	27
INTERSTATE 90 BRIDGE TO 106th ST BRIDGE	24.4	25.7	26.7	17.5	10-01	160-320	1.09	27
106th ST BRIDGE TO TURNING BASIN NO 3	24.6	26.8	24.6	C20.4	10-01	160-400	1.95	27
TURNING BASIN NO 3 TO TURNING BASIN NO 5	24.4	25.4	25.4	D20.0	10-01	200-650	1.47	27
TURNING BASIN NO 5 TO SLIP NO 1	26.0	26.4	26.5	E16.3	10-01	400-1200	.89	27
SLIP NO 1 TO END	F18.2	G23.8	H24.0	I28.0	10-01	1000-1200	.37	27

- A. SHOALING TO 15.9 FEET IN OUTSIDE 20 FEET OF QUARTER.
 B. SHOALING TO 13.7 FEET IN OUTSIDE 20 FEET OF QUARTER.
 C. SHOALING TO 14.1 FEET IN OUTSIDE 15 FEET OF QUARTER.
 D. SHOALING TO 8.5 FEET IN OUTSIDE 15 FEET OF QUARTER.
 E. SHOALING TO 7.9 FEET IN OUTSIDE 30 FEET OF QUARTER.
 F. SHOALING TO 10.6 FEET IN OUTSIDE 100 FEET OF QUARTER.
 G. SHOALING TO 1.7 FEET WITHIN LAST 100 FEET OF QUARTER.
 H. SHOALING TO 5.5 FEET WITHIN LAST 100 FEET OF QUARTER.
 I. SHOALING TO 11.4 FEET WITHIN LAST 100 FEET OF QUARTER.

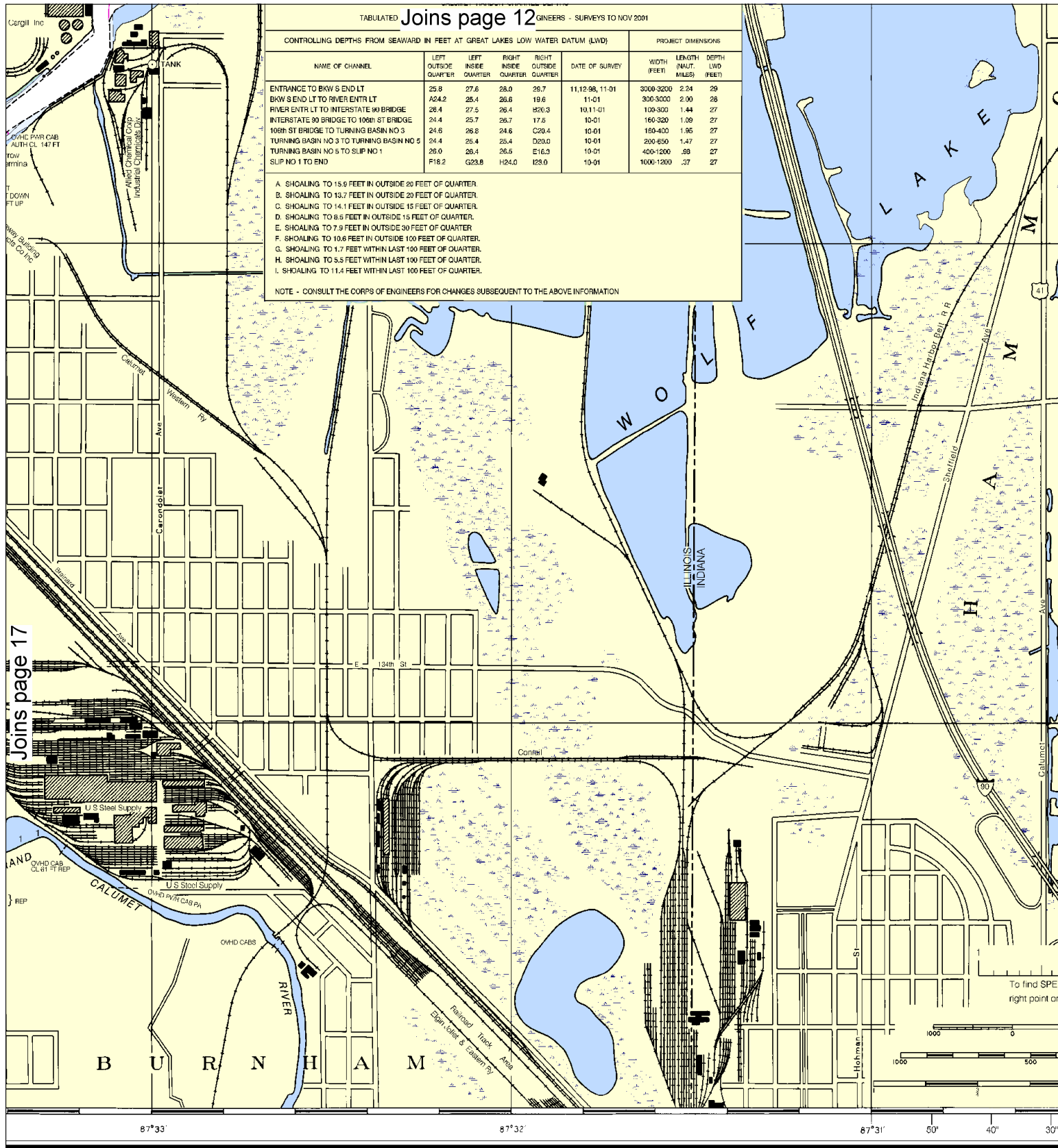
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION



Joins page 18

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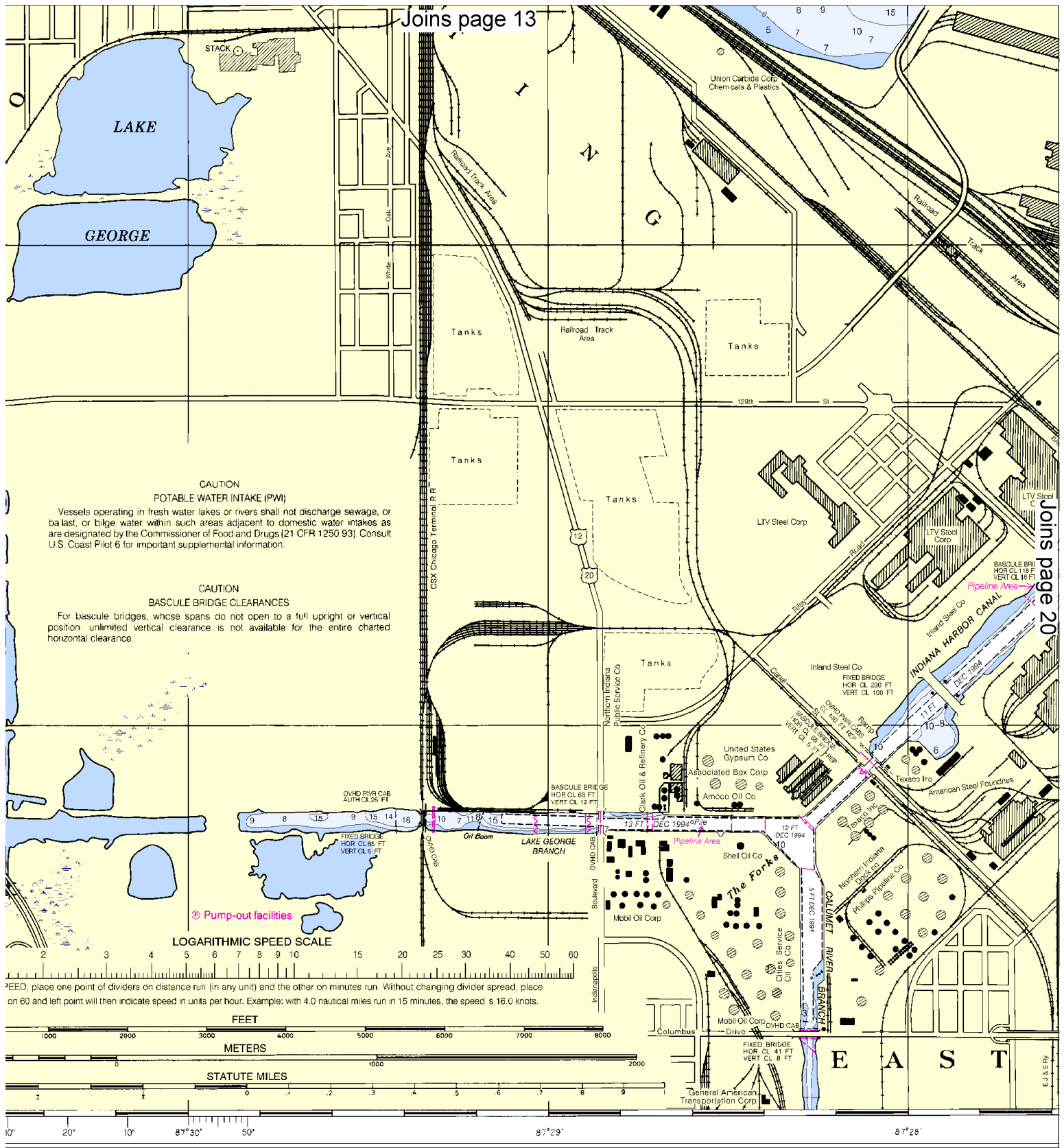


Printed at reduced scale.

SCALE 1:15,000
 Nautical Miles

See Note on page 5.





Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
COAST AND GEODETIC SURVEY

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (RCC) – 216-902-6117

Coast Guard S & R (Milwaukee) – 414-747-7182

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.